## We claim:

- 1. A method of ameliorating chronic allograft rejection in a human or animal allograft recipient comprising administering to the recipient in need of such treatment, in combination, a therapeutically effective amount of cyclosporin and a therapeutically effective amount 2-clorodeoxyadenosine.
- 2. The method according to claim 1 wherein the therapeutically effective amount of cyclosporin is between about seven and about 224 times the amount by mass of 2-chlorodeoxyadenosine.
- 3. The method according to claim 1 wherein the therapeutically effective amount of cyclosporin is between about 1 mg and about 16 mg per kilogram of recipient body mass per day.
- 4. The method according to claim 3 wherein the dosing regime for cyclosporin is between about 7 and about 112 mg per kilogram of recipient body mass per week.
- 5. The method according to claim 4 wherein the dosing regime for cyclosporin is about 5 mg per kilogram of recipient body mass per day for about two weeks followed by about 5 mg per kilogram of recipient body mass about three times per week.
- 6. The method according to claim 5 wherein the daily dose is divided into two equal daily doses.
- 7. The method according to claim 1 wherein the therapeutically effective amount of 2-clorodeoxyadenosine is between about 0.5 mg and about 3 mg per kilogram of recipient body mass per week.
- 30 8. The method according to claim 1 wherein the therapeutically effective amount of 2-chlorodeoxyadenosive is 1 mg per kilogram of recipient body mass per week.

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- 9. The method according to claim 7 wherein the dosing regime for 2-chlorodeoxyadenosine is 1 mg per kilogram of recipient body mass per week.
- 5 10. The method according to claim 7 wherein the dosing regime for 2-chlorodexyadenosine is about 3 mg per kilogram of recipient body mass about every three weeks.
- The method according to claim 7 wherein the dosing regime for 2 chlorodeoxyadenosine is 1.5 mg per kilogram of recipient body mass about every three weeks.
  - 12. The method according to claim 1 wherein the mode of administration of cyclosporin and 2-chlorodeoxyadenosine is subcutaneously, orally, or intravenously.
  - 13. A method of ameliorating chronic allograft rejection in a human or animal allograft recipient comprising administering to an allograft recipient a therapeutically effective amount of cyclosporin and a therapeutically effective amount 2-clorodeoxyadenosine.
  - 14. The method according to claim 12 wherein the therapeutically effective amount of cyclosporin is between about 2 and about 224 times the amount by weight of 2-chlorodeoxyadenosine.
- 25 15. The method according to claim 13 wherein the therapeutically effective amount of cyclosporin is between about 1 mg and about 16 mg per kilogram of recipient body mass per day.
- 16. The method according to claim 13 wherein the dosing regime for cyclosporin is30 between about 7 and about 112 mg per kilogram of recipient body mass per week.

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- 17. The method according to claim 16 wherein the dosing regime for cyclosporin is about 5 mg per kilogram of recipient body mass per day for about two weeks followed by about 5 mg per kilogram of recipient body mass about three times per week.
- 5 18. The method according to claim 17 wherein the daily dose is divided into two equal daily doses.
  - 19. The method according to claim 13 wherein the therapeutically effective amount of 2-clorodeoxyadenosine is between about 0.5 mg and about 3 mg per kilogram of recipient body mass per week.
  - 20. The method according to claim 13 wherein the therapeutically effective amount of 2-chlorodeoxyadenosive is 1 mg per kilogram of recipient body mass per week.
- 15 21. The method according to claim 20 wherein the dosing regime for 2-chlorodeoxyadenosine is 1 mg per kilogram of recipient body mass per week.
  - 22. The method according to claim 20 wherein the dosing regime for 2-chlorodexyadenosine is about 3 mg per kilogram of recipient body mass about three weeks.
  - 23. The method according to claim 20 wherein the dosing regime for 2-chlorodeoxyadenosine is 1.5 mg per kilogram of recipient body mass about every three weeks.
  - 24. The method according to claim 13 wherein the mode of administration of cyclosporin and 2-chlorodeoxyadenosine is subcutaneously, orally, or intravenously.
- 25. A pharmaceutical composition suitable for treating chronic allograft rejection comprising a therapeutically effective amount of cyclosporin, a therapeutically effective

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amount of 2-chlorodeoxyadenosine and a pharmaceutically acceptable diluent, adjuvant or carrier.

- The pharmaceutical composition according to claim 25 wherein the
  therapeutically effective amount of cyclosporin is between about 2 and about 224 times
  the amount by mass of 2-chlorodeoxyadenosine.
  - 27. The pharmaceutical composition according to claim 25 wherein the therapeutically effective amount of cyclosporin is between about 1 mg and about 16 mg per kilogram of recipient body mass per day.
  - 28. The pharmaceutical composition according to claim 25 wherein the therapeutically effective amount of 2-clorodeoxyadenosine is between about 0.5 mg and about 3 mg per kilogram of recipient body mass per week.
  - 29. The pharmaceutical composition according to claim 25 wherein the therapeutically effective amount of 2-chlorodeoxyadenosive is 1 mg per kilogram of recipient body mass per week.
- 20 30. The pharmaceutical composition according to claim 25 wherein the mode of administration of cyclosporin and 2-chlorodeoxyadenosine is subcutaneously, orally, or intravenously.
- 31. A method of preventing chronic allograft rejection in a human or animal allograft
  25 recipient comprising administering to the recipient the pharmaceutical composition according to claim 25.
  - 32. A method of ameliorating chronic allograft rejection in a human or animal allograft recipient comprising administering to the recipient the pharmaceutical composition according to claim 25.

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- 33. A method of preventing arterial atherosclerosis comprising administering the pharmaceutical composition according to claim 25.
- 34. The method according to claim 33 wherein the arterial atherosclerosis is associated with chronic allograft rejection in a human or animal allograft recipient.
  - 35. A method of preventing chronic allograft rejection in animal or human allograft recipient comprising administering to the recipient an amount of cyclosporin and an amount of 2-chorodeoxyadenosine sufficient to suppress the recipient's B-cell mediated response to the allograft.
  - 36. The method according to claim 35 wherein the transplanted organ is a heart and the B-cell mediated response is one or a combination of mononuclear cell infiltration in the myocardium, myocardial fibrosis, and intimal proliferation of smooth muscle cells.